

AMENDMENTS TO THE DRAWINGS

Attached hereto are twenty-two (22) sheets of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84.

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.



REPLACEMENT SHEET

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executed  
3/16/04

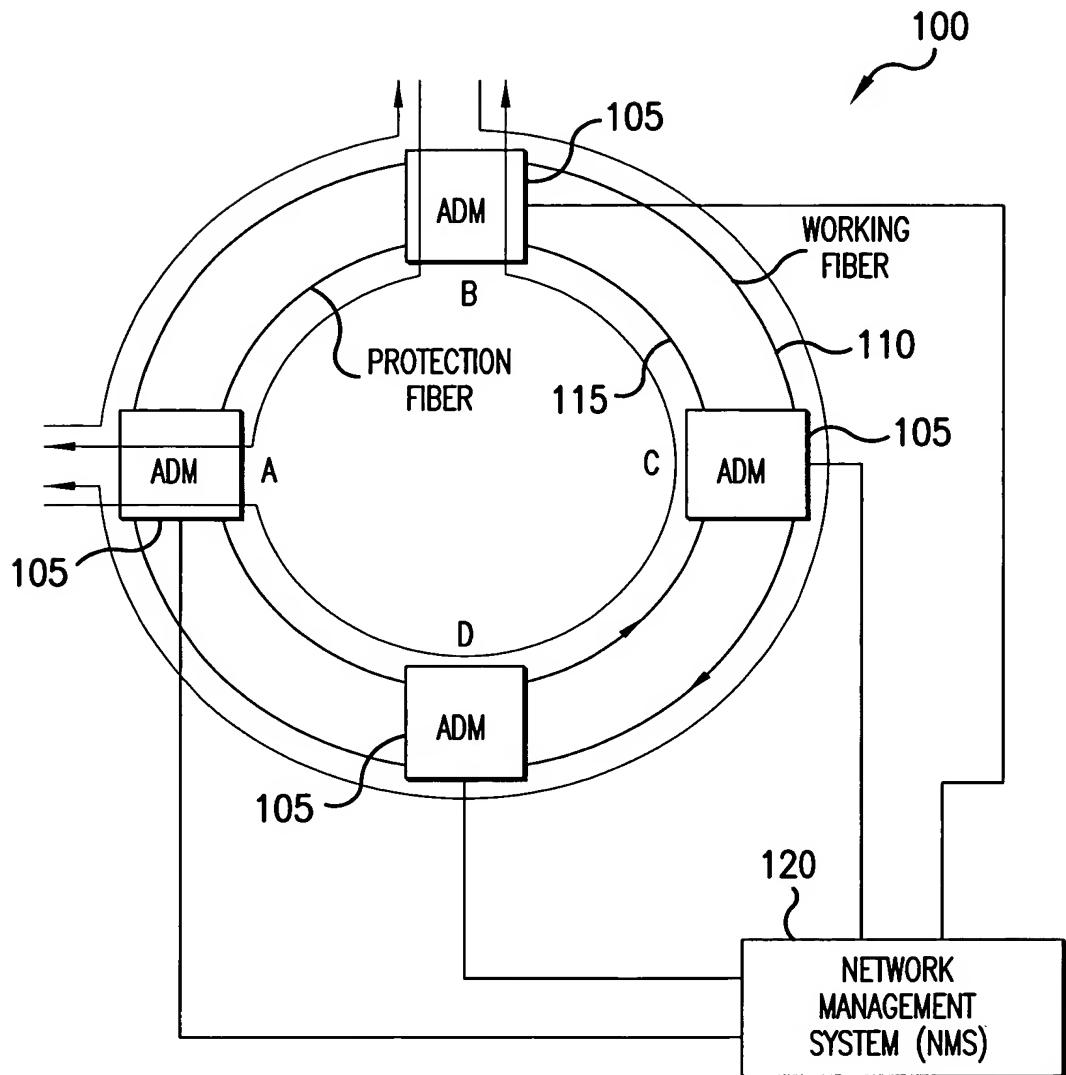
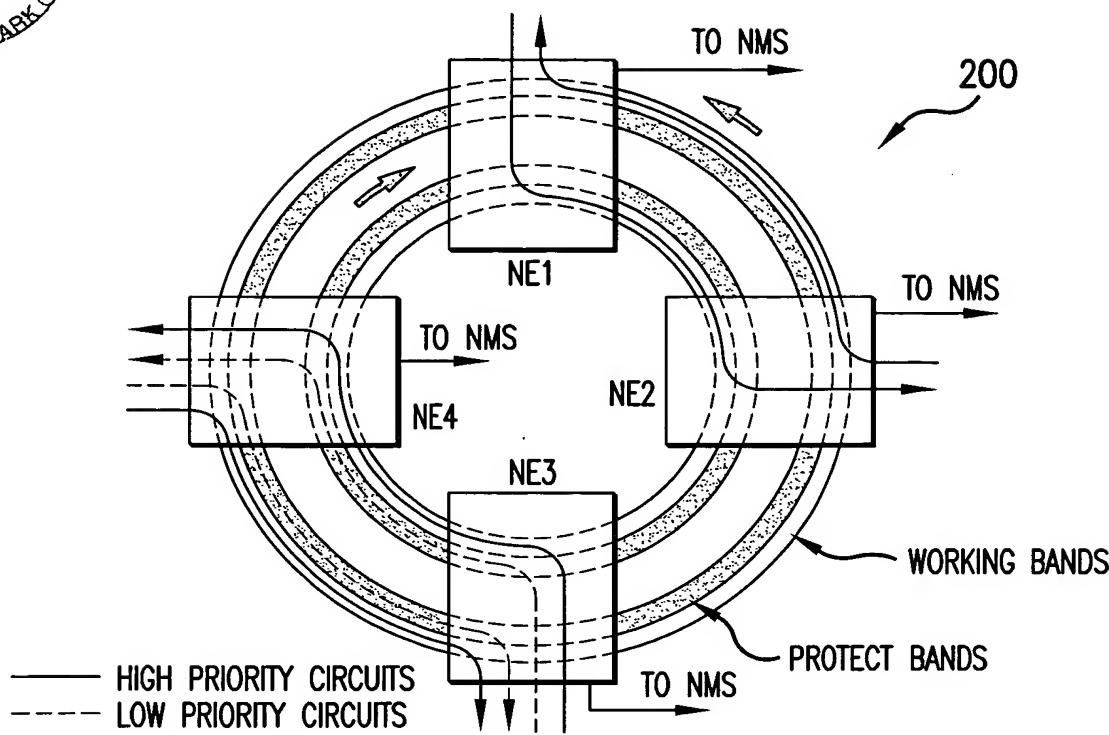


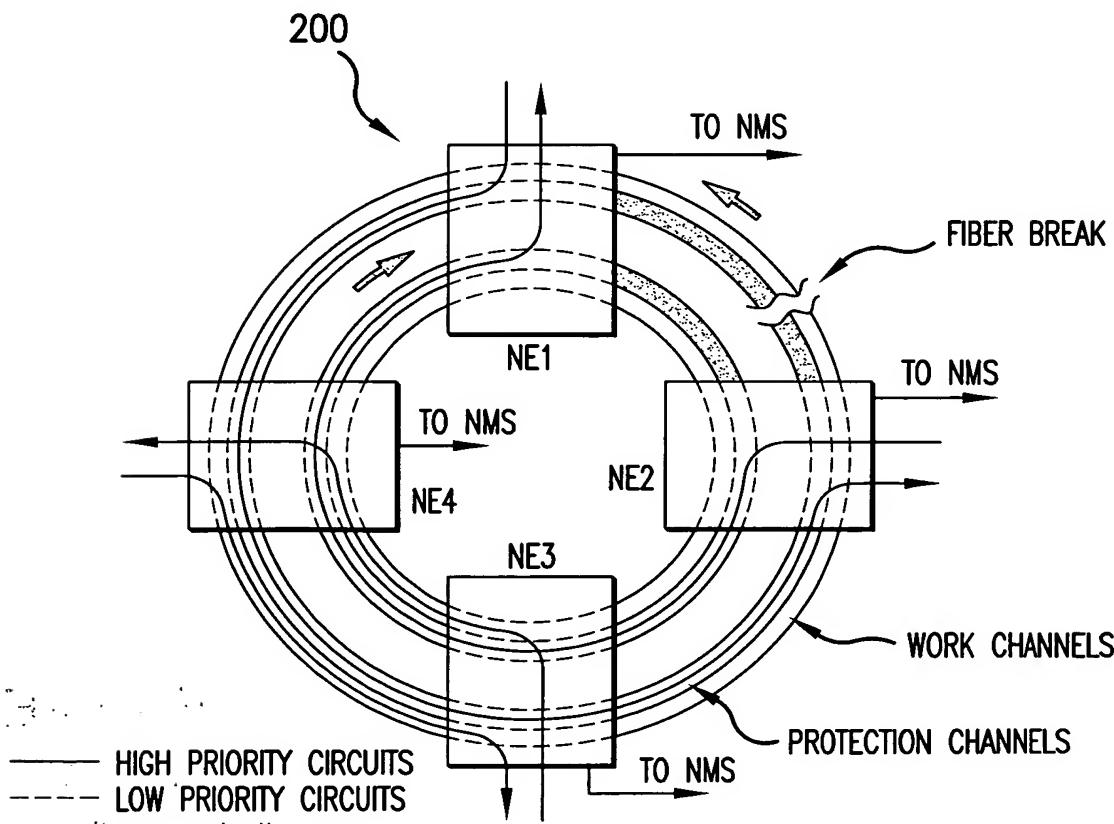
FIG.1  
PRIOR ART



## REPLACEMENT SHEET



**FIG.2**  
PRIOR ART



**FIG.3**  
PRIOR ART



## REPLACEMENT SHEET

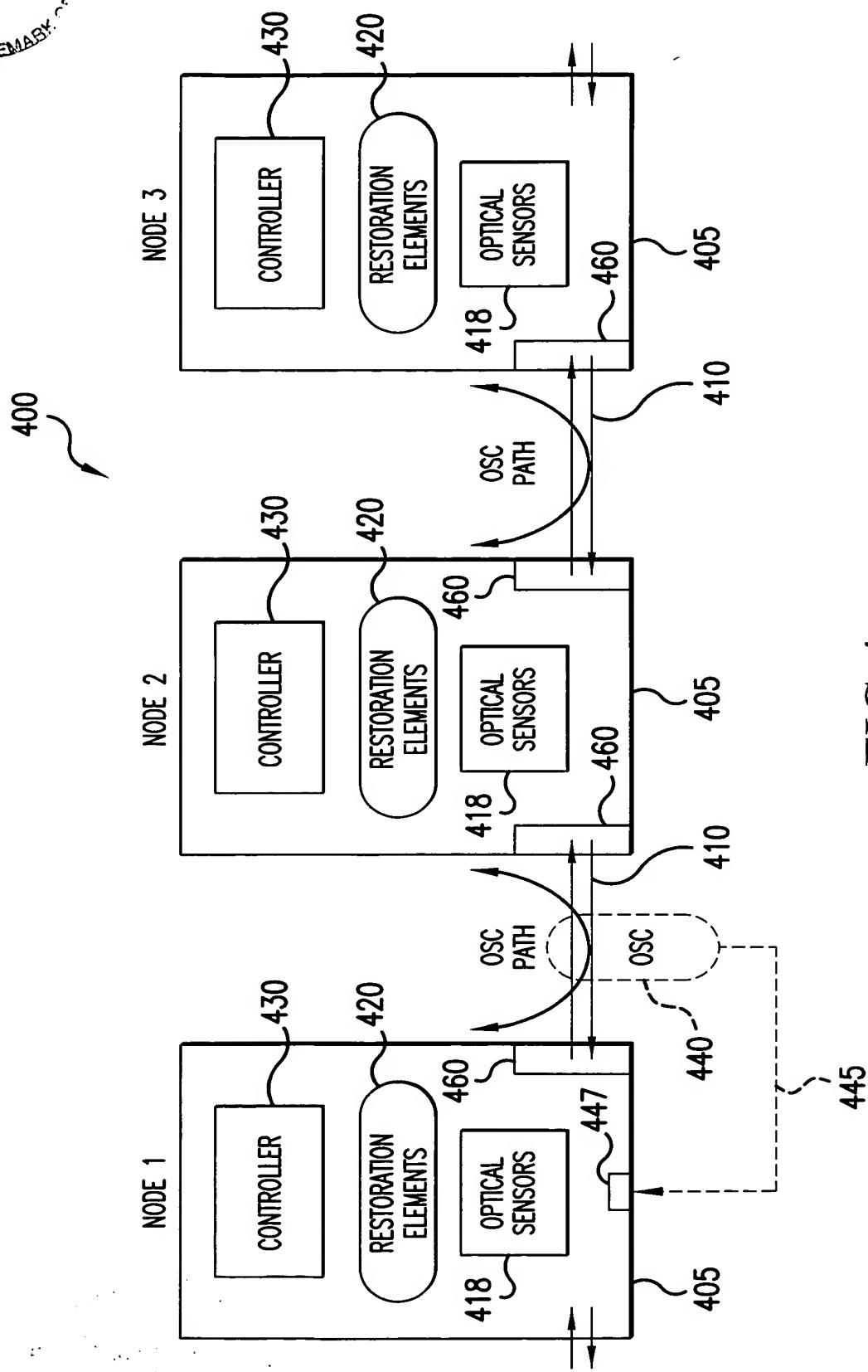


FIG.4



REPLACEMENT SHEET

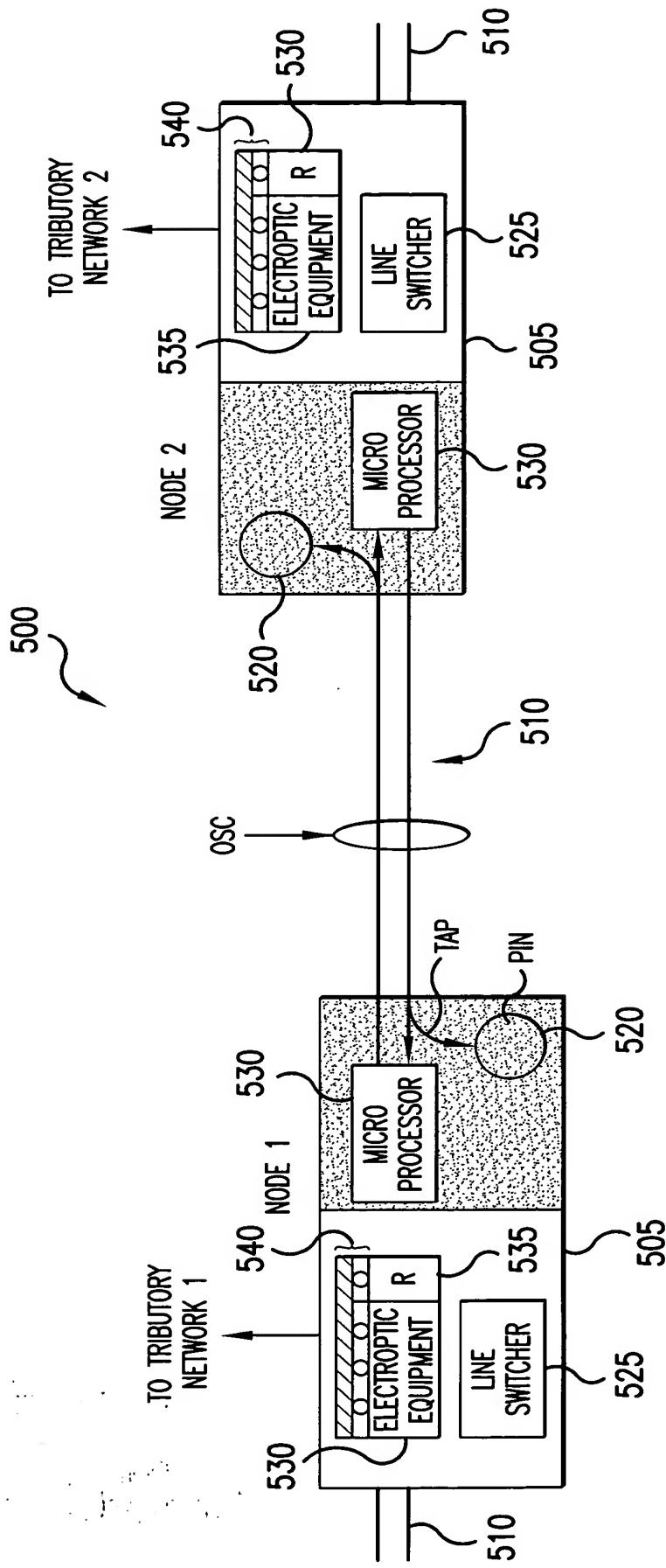


FIG. 5



## REPLACEMENT SHEET

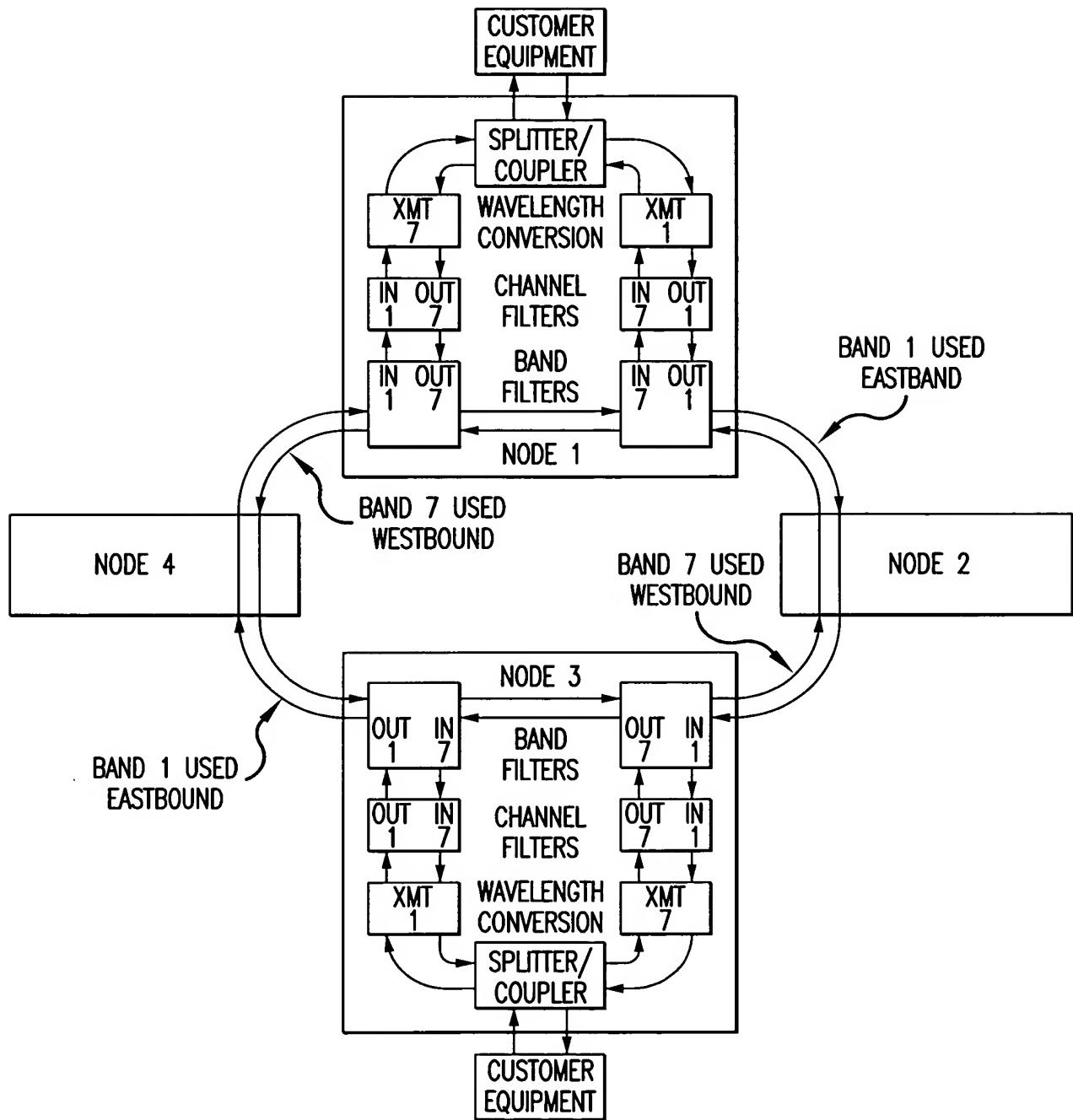


FIG.6



## REPLACEMENT SHEET

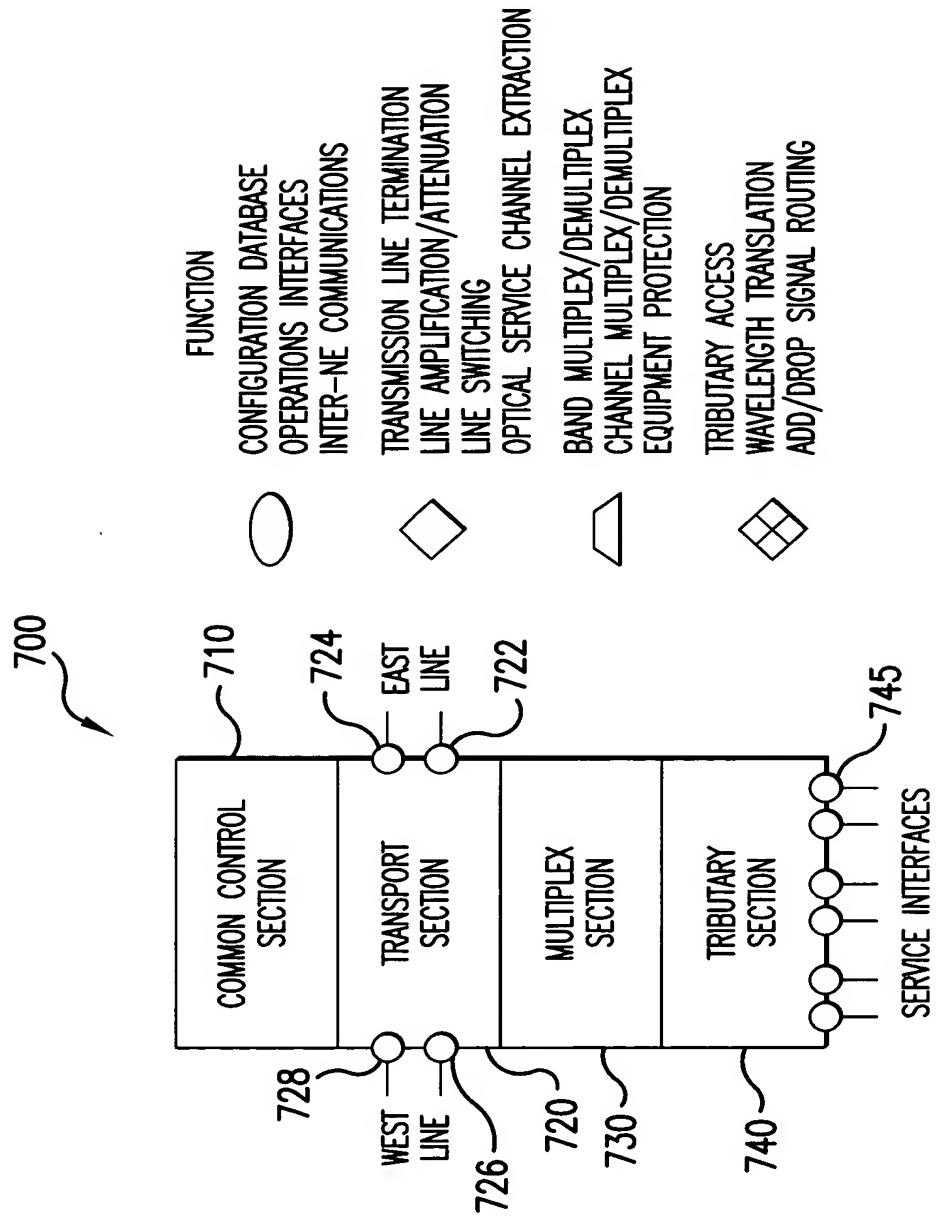


FIG. 7



REPLACEMENT SHEET

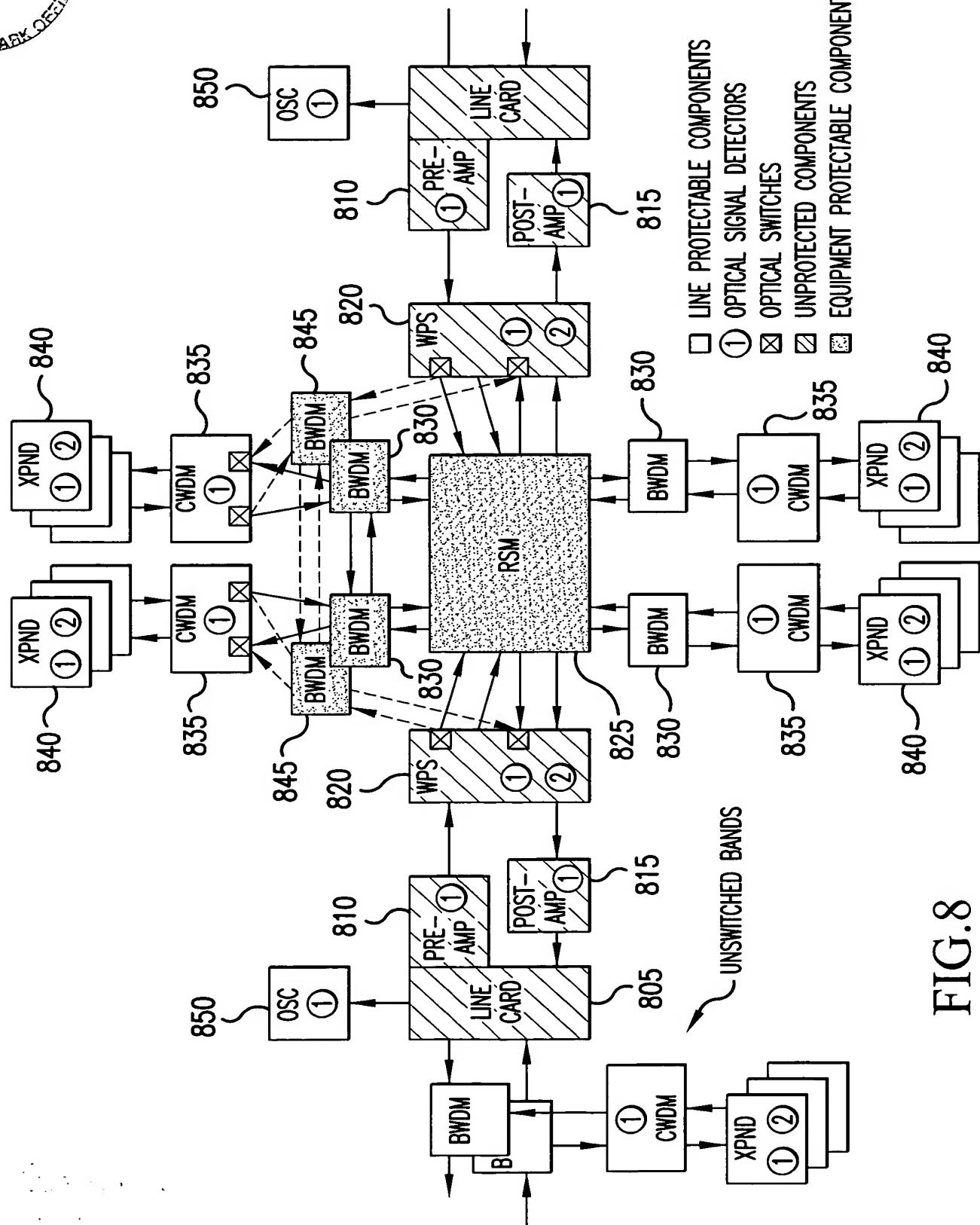


FIG. 8



## REPLACEMENT SHEET

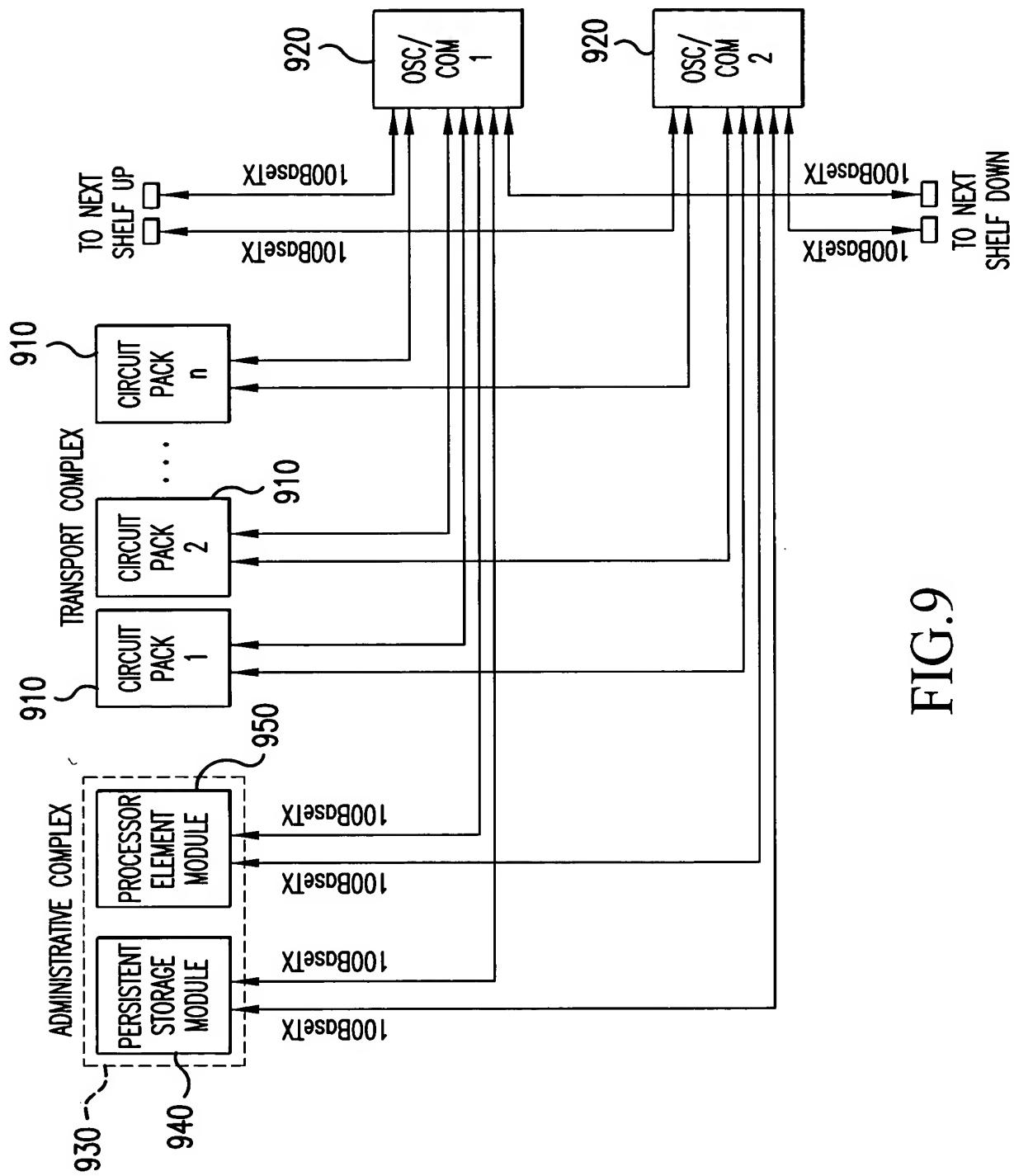
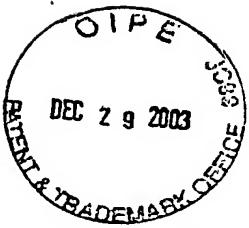


FIG. 9



## REPLACEMENT SHEET

FIG.10A-1

FIG.10A-2

FIG.10A-3

FIG.10A-4

# FIG.10A



## REPLACEMENT SHEET

COMPONENT LINE/ POSTAMP	CONNECTING FIBER LOCAL NODE EFFECT DOWNSTREAM NODE EFFECT	DESIRED PROTECTION ACTION				
		PASSTHRU OPEN NODE NODE	BSAME PASSTHRU	BOPPOSITE PASSTHRU	RSM GLASSTHRU	
FROM WPS TO WPS	WORKING, AND PCA DROPS SEE LOS  NO IMPACT	If LOCAL NODE ADDS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. OTHERWISE, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU CHANNELS DETECT LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.  DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU OR ADD CHANNELS REPORT LOS DOWNSTREAM.	RS	RS	RS	RS
TO UNSWITCHED BWDW	LOCAL WORKING, UCA, AND PCA DROPS SEE LOS  NO IMPACT	If LOCAL NODE ADDS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. OTHERWISE, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU CHANNELS DETECT LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.  DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU OR ADD CHANNELS REPORT LOS DOWNSTREAM.	RS	RS	RS	RS
FROM UNSWITCHED BWDW TO OSC	DO NOT PROTECT AGAINST OSC FAILURE-USE AS RING SWITCH TRIGGER IF APPLICABLE  NO IMPACT	DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU OR ADD CHANNELS REPORT LOS DOWNSTREAM.	RS	RS	RS	RS

**FIG. 10A-1**



**REPLACEMENT SHEET**

NODE CONFIGURATIONS - WCA WITHOUT UCA				NODE CONFIGURATIONS - WCA WITH UCA			
OPEN NODE	PASSTHRU NODE	BSAME PASSTHRU	BOPPOSITE PASSTHRU	OPEN NODE	PASSTHRU NODE	BSAME PASSTHRU	BOPPOSITE PASSTHRU
OSC OK WPS IN LOS RESULT: LOS	N/A	N/A	N/A	N/A			
OSC OK WPS IN LOS RESULT: LOS	N/A	N/A	N/A	N/A			
N/A	N/A	N/A	N/A	OSC OK WPS IN LOS RESULT: LOS			
DOWNTSTREAM OCS LOS LINE IN LOS ACTION: RS							

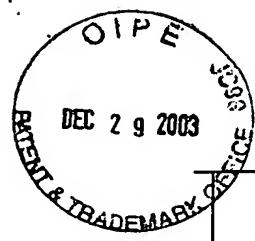
**FIG. 10A-2**



REPLACEMENT SHEET

FROM NEIGHBOR	LOCAL WORKING, UCA, AND PCA DROPS SEE LOS	IF LOCAL NODE ADDS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. OTHERWISE, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU CHANNELS DETECT LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.	RS								
PREAMP	TO WPS OR UNSWITCHED BAND	WORKING AND PCA DROPS SEE LOS  IF LOCAL NODE ADDS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. OTHERWISE, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU CHANNELS DETECT LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.	RS								
	FROM LINE CARD	WORKING AND PCA DROPS SEE LOS  IF LOCAL NODE ADDS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. OTHERWISE, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT. LOCAL PASSTHRU CHANNELS DETECT LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.	RS								
WPS	WORKING FROM RSM  PROTECT FROM RSM (NO ACTION TAKEN SINCE PROTECT EQUIPMENT)	NO IMPACT  LOCAL PASSTHRU AND ADD WORKING CHANNELS REPORT LOS DOWNSTREAM. PCA CHANNELS OK DOWNSTREAM. IF LOCAL NODE HAS PROTECT ACCESS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. IF NO PROTECT ACCESS TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS NO LIGHT.	EQ								
	WORKING FROM BACKUP BNDM	NO IMPACT  LOCAL PASSTHRU AND ADD PCA CHANNELS REPORT LOS DOWNSTREAM. PCA CHANNELS OK DOWNSTREAM. IF LOCAL NODE HAS PROTECT ACCESS	N/A								

FIG. 10A-3



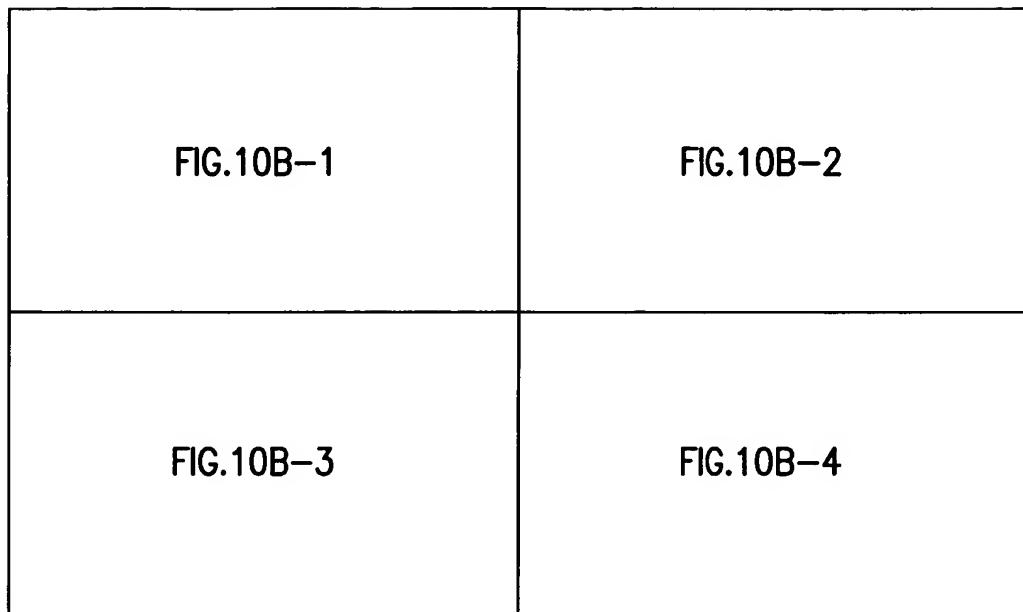
REPLACEMENT SHEET

<u>OSC LOS LINE IN LOS ACTION: RS</u>				
<u>OSC OK WPS IN LOS RESULT: LOS</u>				
<u>OSC OK LINE IN OK RESULT: LOS</u>				
<u>OSC OK LINE IN OK RESULT: LOS</u>				
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

FIG. 10A-4



## REPLACEMENT SHEET



**FIG.10B**



## REPLACEMENT SHEET

WORKING TO RSM	LOCAL WORKING CHANNEL DROPS SEE LOS	IF LOCAL NODE ADDS WORKING CHANNELS OR CARRIES PCA TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. LOCAL PASSTHRU WORKING CHANNELS SEE LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.	EQ	EQ	EQ	EQ	EQ
	PROTECT TO RSM (NO ACTION TAKEN SINCE PROTECT EQUIPMENT)	PROTECT ACCESS DROPS SEE LOS.	N/A	N/A	N/A	N/A	N/A
RSM	WORKING FROM PRIMARY BWDW	LOCAL DROP AND PASSTHRU PCA CHANNELS REPORT LOS	EQ	EQ	EQ	EQ	EQ
	PROTECT FROM BWDW (NO ACTION TAKEN SINCE PROTECT EQUIPMENT)	LOCAL PASSTHRU AND ADD WORKING CHANNELS REPORT LOS DOWNSTREAM. PCA CHANNELS OK. IF LOCAL NODE HAS PCA DOWNSTREAM NEIGHBOR SEES LIGHT.	N/A	N/A	N/A	N/A	N/A
WORKING TO PRIMARY BWDW	LOCAL WORKING CHANNEL DROPS SEE LOS	LOCAL ADD AND PASSTHRU PCA CHANNELS REPORT LOS	EQ	EQ	EQ	EQ	EQ
		IF LOCAL NODE ADDS WORKING CHANNELS OR CARRIES PCA TRAFFIC, DOWNSTREAM NEIGHBOR WPS RECEIVE PIN DETECTS LIGHT. LOCAL PASSTHRU WORKING CHANNELS SEE LOS DOWNSTREAM. LOCAL ADD CHANNELS ARE OK DOWNSTREAM.	EQ	EQ	EQ	EQ	EQ

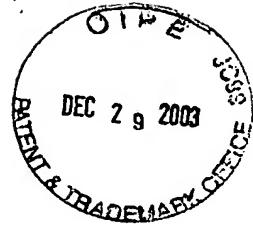
**FIG.10B-1**



## REPLACEMENT SHEET

OSC OK LINE IN OK RESULT: LOS							
N/A							
OSC OK LINE IN OK RESULT: LOS							
N/A							
OSC OK LINE IN OK RESULT: LOS							
N/A							

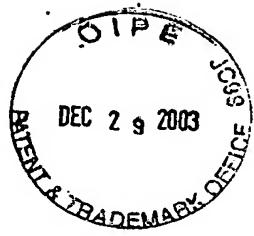
FIG.10B-2



## REPLACEMENT SHEET

PROTECT TO BROAD (NO ACTION TAKEN SINCE PROTECT EQUIPMENT)		LOCAL DROP AND PASSTHRU PCA CHANNELS REPORT LOS	N/A	N/A	N/A	N/A	N/A
BROAD TO CWDM	LOCAL CHANNEL DROPS SEE LOS	NO IMPACT	EQ (LOS IF UCA)				
FROM CWDM	NO IMPACT	CWDM ADD CHANNELS SEE DOWNSTREAM LOS. OTHER ADD CHANNELS AND PASSTHRU ARE OK.	EQ (LOS IF UCA)	N/A			
TO BROAD (FROM RSM TOWARD PASSTHRU)	LOCAL CHANNEL DROPS DOWNSTREAM OF FAILURE SEE LOS	PASSTHRU WORKING CHANNELS SEE LOS DOWNSTREAM.	EQ	EQ	EQ	N/A	N/A
FROM BROAD (FROM PASSTHRU TOWARD RSM)	NO IMPACT	PASSTHRU CHANNELS SEE LOS DOWNSTREAM. ADDED CHANNELS UPSTREAM OF THE FAILURE SEE LOS DOWNSTREAM. CHANNELS ADDED FOLLOWING FAILURE ARE OK.	EQ	EQ	EQ	N/A	N/A
TO/FROM BROAD (PASSTHRU)	NO IMPACT	PASSTHRU CHANNELS SEE LOS DOWNSTREAM. ADDED CHANNELS ARE OK DOWNSTREAM.	N/A	EQ	N/A	N/A	N/A
WCJ	TO CWDM	NO IMPACT	LOS	LOS	LOS	LOS	LOS
	FROM CWDM	LOCAL LOS	LOS	LOS	LOS	LOS	LOS

FIG. 10B-3



## REPLACEMENT SHEET

N/A							
OSC OK LINE IN OK RESULT: LOS							
OSC OK LINE IN OK RESULT: LOS							
OSC OK LINE IN OK RESULT: LOS							
N/A							
LOS							
LOS							

FIG.10B-4



## REPLACEMENT SHEET

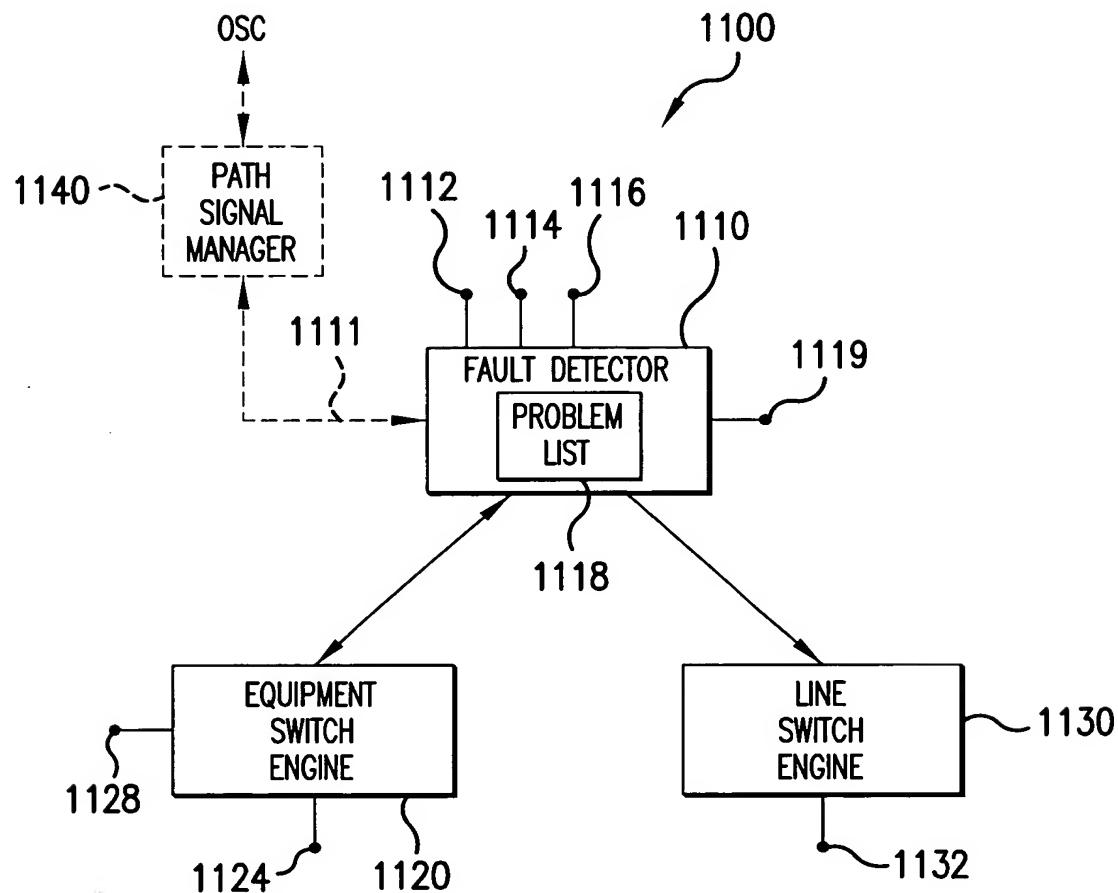


FIG.11



## REPLACEMENT SHEET

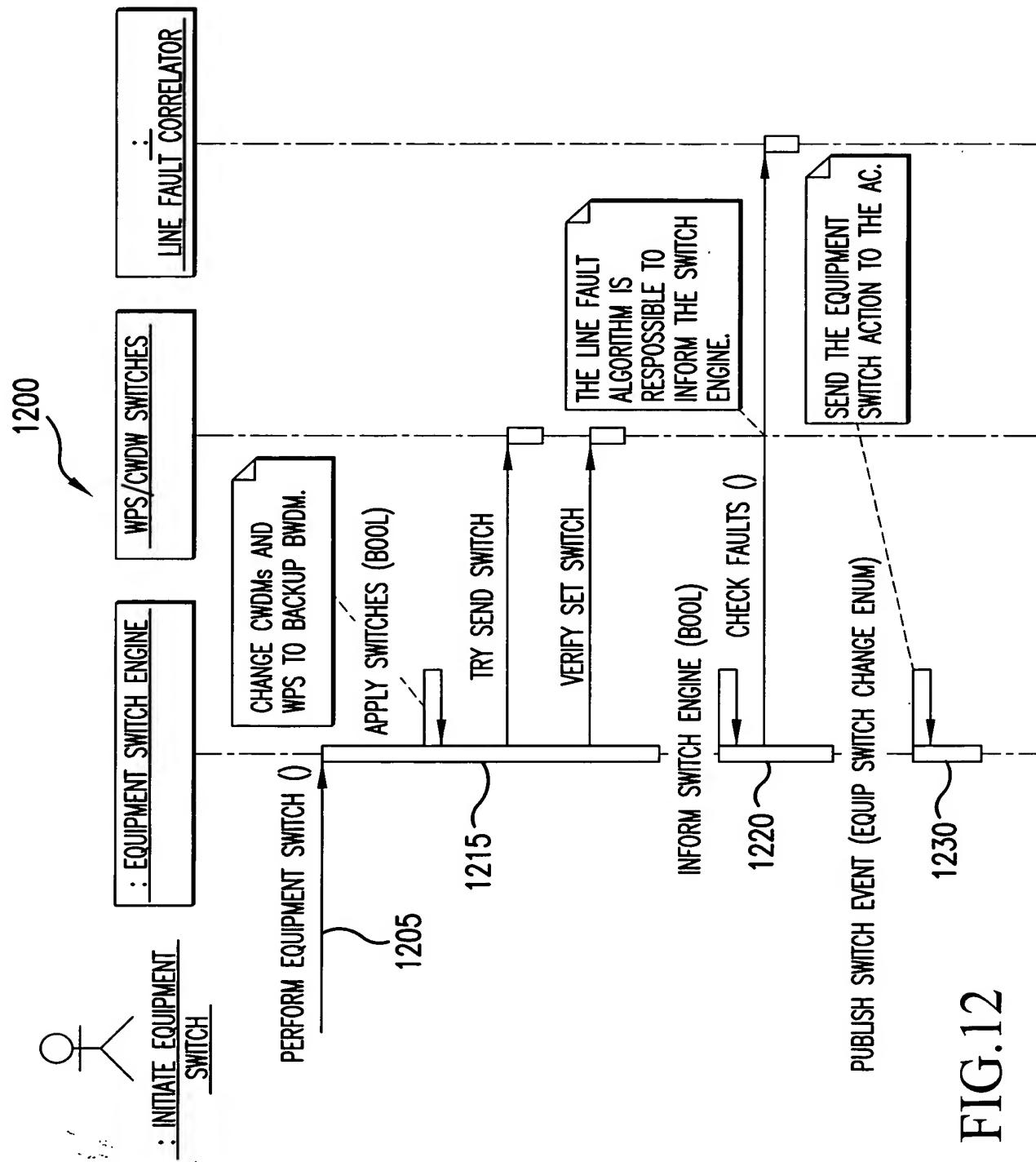


FIG. 12



REPLACEMENT SHEET

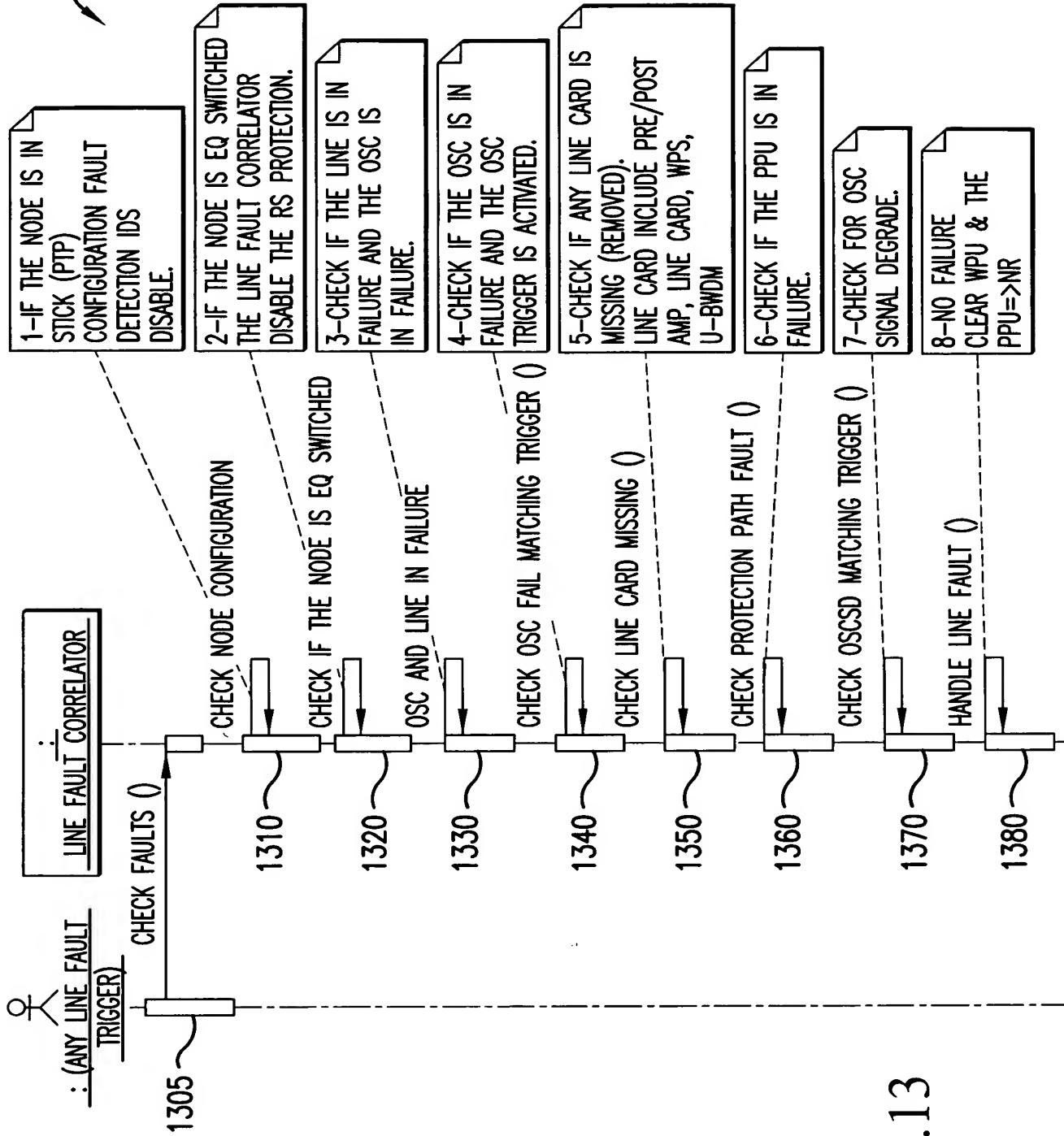
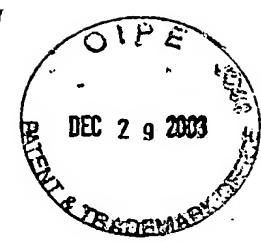


FIG.13



REPLACEMENT SHEET

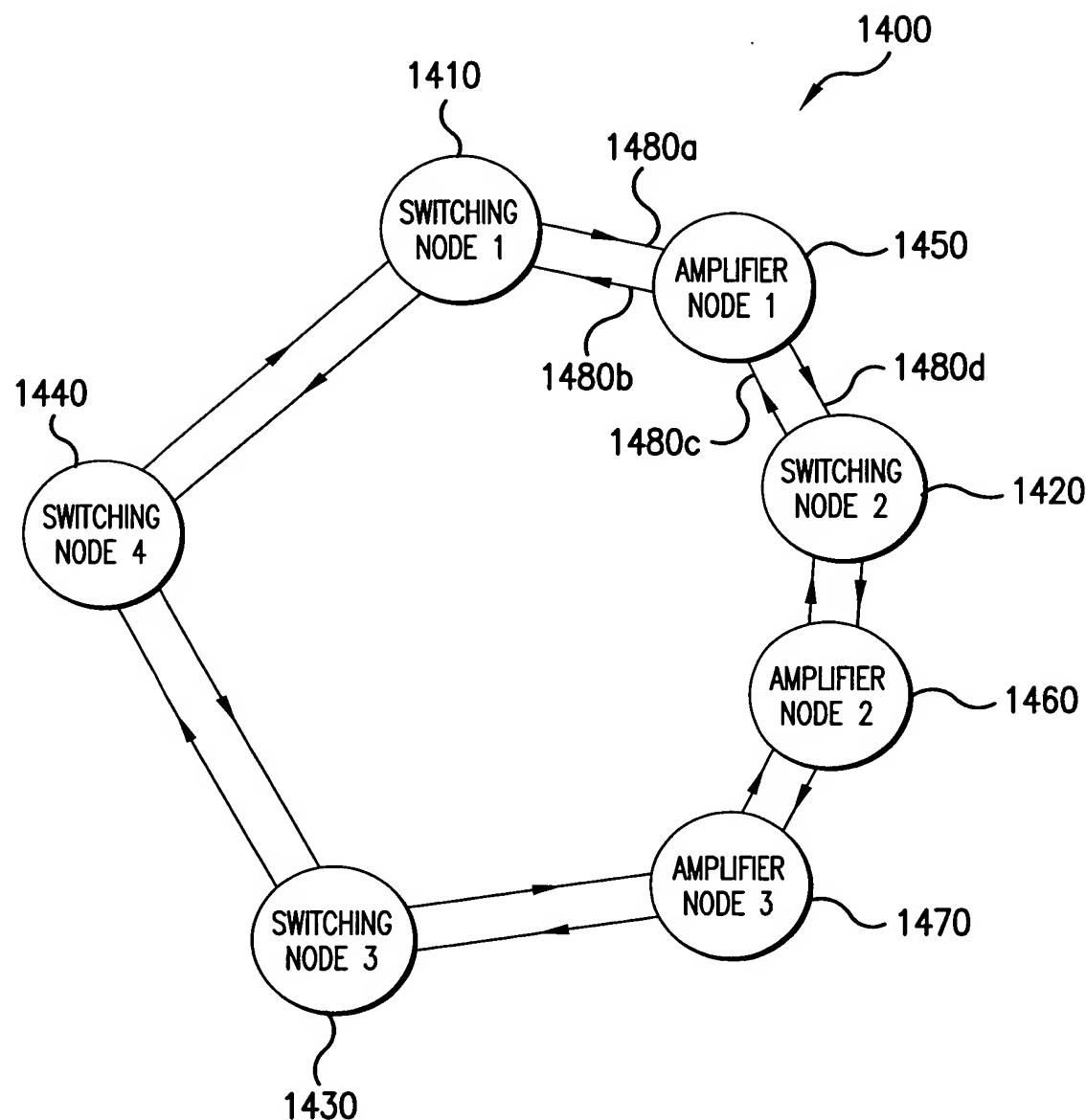


FIG.14